

CLAIMS:

1. A safety arrangement in a motor vehicle, the motor vehicle being provided with at least one seat which is removably mounted within the vehicle, the at least one seat having thereon at least one safety element in the form of a safety device being adapted to be actuated in the event that an accident should occur, the safety arrangement incorporating a communication channel having a part on the vehicle and a part on the seat providing communication between a control unit mounted on the vehicle to the or each safety element provided on the seat, at least part of the communication channel being a wireless link, there being a first system for providing a signal to the control unit when the seat is present in the vehicle and there being an independent system, which is separate from the seat part of the communication channel, for determining the presence of the seat in the vehicle and for providing a signal indicative of the presence of the seat in the vehicle to the control unit.
2. An arrangement according to Claim 1 wherein the first system is constituted by the said communication channel.
3. An arrangement according to Claim 1 or 2 wherein the active safety device is an air-bag or a safety-belt pre-tensioner.
4. An arrangement according to any one of the preceding Claims wherein at least one safety device on the seat includes a diagnostic sensor, the diagnostic sensor being adapted to pass a signal to the control unit through the communication channel.

5. An arrangement according to any one of the preceding Claims wherein the seat includes at least one sensor adapted to sense the weight of an occupant of the seat.
6. An arrangement according to any one of the preceding Claims wherein the independent system is an active system, including a transmitter on the seat adapted to transmit a signal to the control unit through a second communication channel when interrogated.
7. An arrangement according to any one of Claims 1 to 3 wherein the independent system is a passive arrangement.
8. An arrangement according to Claim 7 wherein the independent system incorporates a micro-switch.
9. An arrangement according to Claim 7 wherein the independent system incorporates a magnet fixed on the seat and a Hall effect switch mounted on the chassis.
10. An arrangement according to Claim 7 wherein the independent system incorporates a light responsive sensor and an element on the seat detectable by the light responsive sensor.
11. An arrangement according to Claim 10 wherein the element on the seat is a light reflector.
12. An arrangement according to Claim 10 wherein the element on the seat is a bar code.

13. An arrangement according to any one of Claims 10 to 12 wherein a light source is associated with the light sensor to illuminate the element on the seat.

14. An arrangement according to any one of the preceding Claims wherein the or at least one communication channel incorporates inductive coils forming the wireless link in the communication channel between the control unit and the seat.

15. An arrangement according to Claim 14 wherein the vehicle and seat are adapted for power to be transferred from the vehicle to the seat through the inductive coil.

16. An arrangement according to Claim 15 wherein the seat incorporates a storage arrangement in which transferred power may be stored within the seat.

17. An arrangement according to any one of the preceding Claims incorporating an alarm signal generator adapted to be actuated if only one of said first system and said independent system provide a signal indicative of the presence of the seat.

18. An arrangement according to any one of the preceding Claims wherein the seat is mounted on elongate track units mounted in a vehicle, at least the or one of the communication channels passing along one track unit.